

MULTI – SENSOR FUSION

Abstract of the Disclosure

Systems and methods are disclosed for establishing a mobile network in which each mobile unit, such as a car, truck or other vehicle equipped with the multi – sensors, processor and receiver/transmitter of the invention, becomes a node able to receive and transmit a wide variety of information, including for example, information about traffic conditions, vehicle mechanical/electrical status, interactive game playing information, streaming audio and video, email, and voice mail. In one aspect, the invention uses multi-sensor fusion technology to determine the best value of a monitored variable, for example, the real time locations of each mobile unit, that is then optionally communicated to others via the network. The system of the invention also provides a new method of traffic control using real time traffic positioning and density data. The invention also provides methods and systems for enhancing driver safety. In another aspect, the system may optionally use a unique secure dynamic link allocation system to improve the information transfer from one node (mobile unit) to another and to other networks, such as the Internet.